

# **REPORT OF THE COMMITTEE ON PUBLIC INFRASTRUCTURE, TECHNOLOGY AND SUSTAINABILITY**

## **Voting Members:**

Carol Fukunaga, Chair; Joey Manahan, Vice-Chair;  
Ron Menor, Kymberly Marcos Pine, Heidi Tsuneyoshi

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Committee Meeting Held  
March 25, 2019

Honorable Ann H. Kobayashi  
Chair, City Council  
City and County of Honolulu

Madam Chair:

Your Committee on Public Infrastructure, Technology and Sustainability, which considered Resolution 19-49 entitled:

**"RESOLUTION URGING THE CITY ADMINISTRATION TO PROVIDE A REPAIR AND MITIGATION PLAN FOR THE INFRASTRUCTURE ISSUES OCCURRING IN PALOLO VALLEY ALONG WAIOMAO ROAD, KUAHEA STREET, AND KUAHEA PLACE,"**

introduced on February 28, 2019, reports as follows:

The purpose of the Resolution is to urge the City Administration to provide a repair and mitigation plan for infrastructure issues in Palolo Valley along Waiomao Road, Kuahea Street, and Kuahea Place.

The introducer of the Resolution explained the conditions that Palolo Valley residents living on Waiomao Road, Kuahea Street, and Kuahea Place face daily just to get in and out of their homes, including sliding down their driveways and crawling on all fours to reach their front doors. She noted that the conditions have been deteriorating for years, with the City attempting to handle the crumbling land situation by cementing five drainage pipes and fixing the roads. She also expressed her concern that homeowners were being cited by the Department of Planning and Permitting for warped walls and other structural hazards in their homes caused by the land movements.

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**CITY COUNCIL**  
CITY AND COUNTY OF HONOLULU  
HONOLULU, HAWAII

ADOPTED ON

**APR 17 2019**

COMMITTEE REPORT NO.

**83**

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The Director of the Department of Design and Construction ("DDC") agreed to provide its repair and mitigation plan for the infrastructure that the City owns, which in this case consists of roadways. He stated that the conditions of the roadways are considered an emergency and DDC will work to fix the roadways, which in turn should stabilize utility lines to improve functionality and reduce outages. He explained that the City believes issues surrounding the damages to private properties should be discussed in the Committee on Executive Matters and Legal Affairs.

Two residents testified in favor of the Resolution, requesting assistance from the City to fix the infrastructure and other structural problems in their neighborhood. One of these individuals also submitted written testimony in support of the Resolution. A resident of Kuahea Place submitted written testimony in support of the Resolution, citing the need to live in a safe environment with access to basic services. He noted that the unstable terrain causes daily water, electrical, or cable service outages and prevents mail delivery by the U.S. Postal Services. He was also concerned with the health and safety of the residents, many of whom are elderly, because ambulance and fire department vehicles are unable to access the homes on his street. Another resident of the same street submitted written comments, stating that the "various agencies are aware of the problems but there seems to be no immediate solution or relief" and the "dire need to repair the area, due to land movements affecting the streets and houses shifting off [their] foundations."

The Representative from State House District 20 submitted written testimony strongly supporting the Resolution with examples of what some of his constituents endure daily, and noting that "residents of this area are desperate for help that only government is able to provide."

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Your Committee considered and approved a proposed posted CD1 version that makes the following amendments:

A. Adds new WHEREAS clauses 6 through 10, that read as follows:

WHEREAS a geological survey by the U.S. Department of the Interior on the relation of slow-moving landslides to earth materials and other factors in valleys of the Honolulu District of Oahu, Hawaii, published in 1995 ("Survey"), noted the landslide on Waiomao Road and existing problems with land stabilization, stating:

"Slow-moving landslides have been a costly problem in Honolulu since about 1954 (Peck, 1959). A landslide that occurred at that time on Waiomao Road in Palolo Valley was extensively studied to design stabilization measures (Peck, 1959, 1967, 1968). Attempts at stabilization were unsuccessful, however, and ultimately about 40 homes on the landslide were demolished. . . ."

(Survey, at page 2); and

WHEREAS the Survey further notes that the rainfall in Palolo Valley is a contributing factor to slow-moving landslides, stating:

"Rainfall is important to slow-moving landslides in two ways. First, subsurface water pressure, which is an

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immediate cause of movement, is related directly to amount of rainfall (Baum and Reid, 1992). Rate of landslide movement at Waiomao Road in Palolo Valley, for example, has been correlated with rainfall in the preceding 10-day period (Peck, 1967). . . ."

(Survey, at page 5); and

WHEREAS, according to a report by the University of Hawaii's School of Ocean and Earth Sciences and Technology entitled "Mapping the Susceptibility to Slow-Moving Landslides on O'ahu," published in May of 2018, early investigations of slow-moving landslides on O'ahu focused on two landslides that occurred in new developments in Honolulu in the 1950s and 1960s: the Waiomao Slide in Palolo Valley (subdivision completed late 1952; problems noticed by March 1954) (Peck, 1959) and the Hind Iuka landslide in Aina Haina (development approved 1956; movement noticed in early 1966) (Peck, 1968). Although those two landslides were studied and remedial measures attempted, few studies were conducted on a regional scale; and

WHEREAS, in light of the historical documentation of slow-moving landslides along Waiomao Road, Kuaheha Street, and Kuaheha Place, and existing conditions in Palolo Valley that would hinder stabilization of the area, a geological study on a regional scale may be necessary to accurately assess the existing ground conditions; and

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WHEREAS, since the property directly above Kuahea Street is owned by the State of Hawaii, the City should work with the State of Hawaii in conducting the geological survey of the region; and

- B. Adds a new BE IT FURTHER RESOLVED clause that reads as follows:

BE IT FURTHER RESOLVED that the City Administration work with the State of Hawaii to cooperatively assess and investigate the area above Kuahea Street, Kuahea Place, and Waiomao Road, and conduct a region-wide geological survey which may determine the cause of earth movement in the area; and

- C. Revises the BE IT FINALLY RESOLVED clause to list additional recipients, and to read as follows:

BE IT FINALLY RESOLVED that copies of this resolution be transmitted to the Mayor, the Managing Director, the Director of Transportation Services, the Chief Engineer of the Department of Facility Maintenance, the Director of Environmental Services, the Manager and Chief Engineer of the Board of Water Supply, Senator Les Ihara, Speaker Emeritus Calvin Say, and the Chairperson of the State of Hawaii Department of Land and Natural Resources.

- D. Makes miscellaneous technical and nonsubstantive amendments to comport with current drafting conventions.

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Your Committee on Public Infrastructure, Technology and Sustainability is in accord with the intent and purpose of Resolution 19-49, as amended herein, and recommends its adoption in the form attached hereto as Resolution 19-49, CD1. (Ayes: Fukunaga, Kobayashi [temporary voting member], Tsuneyoshi – 3; Noes: None; Excused: Manahan, Menor, Pine – 3.)

Respectfully submitted,

  
Committee Chair

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# CITY COUNCIL

CITY AND COUNTY OF HONOLULU  
HONOLULU, HAWAII

No. **19-49, CD1**

## RESOLUTION

URGING THE CITY ADMINISTRATION TO PROVIDE A REPAIR AND MITIGATION PLAN FOR THE INFRASTRUCTURE ISSUES OCCURRING IN PALOLO VALLEY ALONG WAIOMAO ROAD, KUAHEA STREET, AND KUAHEA PLACE.

WHEREAS, the residents of Waiomao Road, Kuahea Street, and Kuahea Place are currently faced with a number of significant concerns such as: buckling and cracked streets, sewage leaks, water and electricity outages, and potential landslides; and

WHEREAS, the residents of Waiomao Road, Kuahea Street, and Kuahea Place have been subject to these infrastructure concerns for a number of years, with little to no assistance from the City and County of Honolulu ("City"); and

WHEREAS, these infrastructure issues are a direct threat to the health and safety of the residents of Waiomao Road, Kuahea Street, and Kuahea Place and to the general public; and

WHEREAS, in a story dated July 26, 2017, HawaiiNewsNow stated that the cause of the issues with the roads, infrastructure, and land is due to a "serious ground erosion problem"; and

WHEREAS, the same July 26, 2017, HawaiiNewsNow article also noted that the City had hired a company to repair the damage to Kuahea Street, however, the work was never completed; and

WHEREAS a geological survey by the U.S. Department of the Interior on the relation of slow-moving landslides to earth materials and other factors in valleys of the Honolulu District of Oahu, Hawaii, published in 1995 ("Survey"), noted the landslide on Waiomao Road and existing problems with land stabilization, stating:

"Slow-moving landslides have been a costly problem in Honolulu since about 1954 (Peck, 1959). A landslide that occurred at that time on Waiomao Road in Palolo Valley was extensively studied to design stabilization measures (Peck, 1959, 1967, 1968). Attempts at stabilization were unsuccessful, however, and ultimately about 40 homes on the landslide were demolished. . . ."

(Survey, at page 2); and

WHEREAS the Survey further notes that the rainfall in Palolo Valley is a contributing factor to slow-moving landslides, stating:



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No. **19-49, CD1**

## RESOLUTION

"Rainfall is important to slow-moving landslides in two ways. First, subsurface water pressure, which is an immediate cause of movement, is related directly to amount of rainfall (Baum and Reid, 1992). Rate of landslide movement at Waiomao Road in Palolo Valley, for example, has been correlated with rainfall in the preceding 10-day period (Peck, 1967). . ."

(Survey, at page 5); and

WHEREAS, according to a report by the University of Hawaii's School of Ocean and Earth Sciences and Technology entitled "Mapping the Susceptibility to Slow-Moving Landslides on O'ahu," published in May of 2018, early investigations of slow-moving landslides on O'ahu focused on two landslides that occurred in new developments in Honolulu in the 1950s and 1960s: the Waiomao Slide in Palolo Valley (subdivision completed late 1952; problems noticed by March 1954) (Peck, 1959) and the Hind Iuka landslide in Aina Haina (development approved 1956; movement noticed in early 1966) (Peck, 1968). Although those two landslides were studied and remedial measures attempted, few studies were conducted on a regional scale; and

WHEREAS, in light of the historical documentation of slow-moving landslides along Waiomao Road, Kuahea Street, and Kuahea Place, and existing conditions in Palolo Valley that would hinder stabilization of the area, a geological study on a regional scale may be necessary to accurately assess the existing ground conditions; and

WHEREAS, since the property directly above Kuahea Street is owned by the State of Hawaii, the City should work with the State of Hawaii in conducting the geological survey of the region; and

WHEREAS, the City is responsible for the maintenance and repair of City-owned infrastructure, such as roads, and sewer and water pipes, and drainage systems, as well as the safety and welfare of the public affected by infrastructure issues; now, therefore,

BE IT RESOLVED by the Council of the City and County of Honolulu that it urges the City Administration to provide a repair and mitigation plan for infrastructure issues in Palolo Valley along Waiomao Road, Kuahea Street, and Kuahea Place; and

BE IT FURTHER RESOLVED that the City Administration work with the State of Hawaii to cooperatively assess and investigate the area above Kuahea Street, Kuahea Place, and Waiomao Road, and conduct a region-wide geological survey which may determine the cause of earth movement in the area; and





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No. 19-49, CD1

## RESOLUTION

BE IT FINALLY RESOLVED that copies of this resolution be transmitted to the Mayor, the Managing Director, the Director of Transportation Services, the Chief Engineer of the Department of Facility Maintenance, the Director of Environmental Services, the Manager and Chief Engineer of the Board of Water Supply, Senator Les Ihara, Speaker Emeritus Calvin Say, and the Chairperson of the State of Hawaii Department of Land and Natural Resources.

INTRODUCED BY:

Ann Kobayashi

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DATE OF INTRODUCTION:

February 28, 2019

Honolulu, Hawaii

Councilmembers